

Indiana's Response to Intervention Academy



Data-Based Decision Making

Ginger Miller, Ph.D.

vmiller4@isugw.indstate.edu

May 13, 2009

Supported by a grant through the Indiana Department of Education and offered through the Collaborative Problem Solving Project at the Blumberg Center at Indiana State University

Components to Consider

- ❑ Leadership
- ❑ Evidence-based core curriculum, instruction, & interventions/extensions
- ❑ Assessment and progress monitoring system
- ❑ Data-based decision making
- ❑ Cultural responsiveness
- ❑ Family, community & school partnerships

Integrated System for Academic and Behavioral Supports

Tier 3:

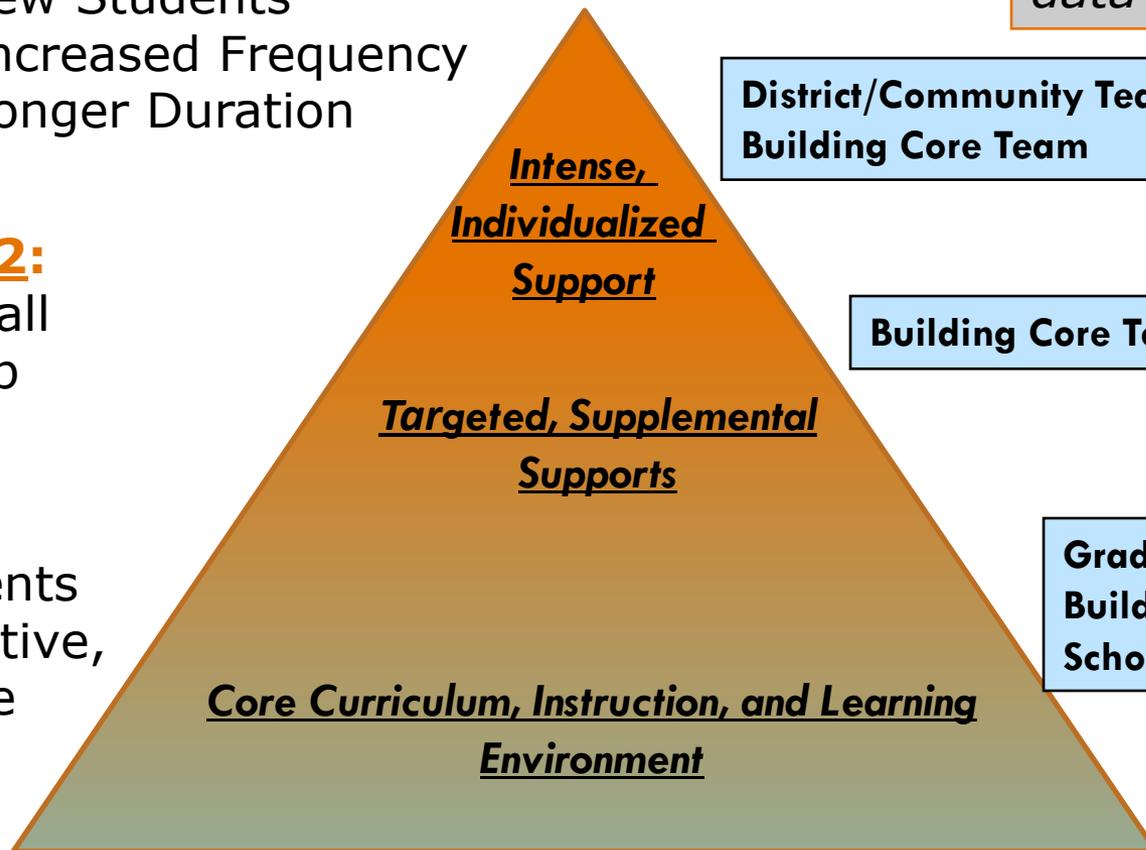
- Few Students
- Increased Frequency
- Longer Duration

Tier 2:

- Small Group

Tier 1:

- All Students
- Preventative, Proactive



**District/Community Team
Building Core Team**

Building Core Team

**Grade Level Teams
Building Core Team
School Improvement Team**

Services across tiers are fluid and data-driven

Preview: Connecting Data-Based Decision Making to Indiana's Vision of RTI

- One component of Indiana's vision of response to intervention
- Utilizes a problem solving method across all tiers that relies on data to:
 - Determine core curriculum, instruction, interventions, and extensions
 - Determine the effectiveness of core curriculum, instruction, interventions and extensions
 - Determine the frequency of progress monitoring

OUTCOMES

As a result of this presentation, you will. . .

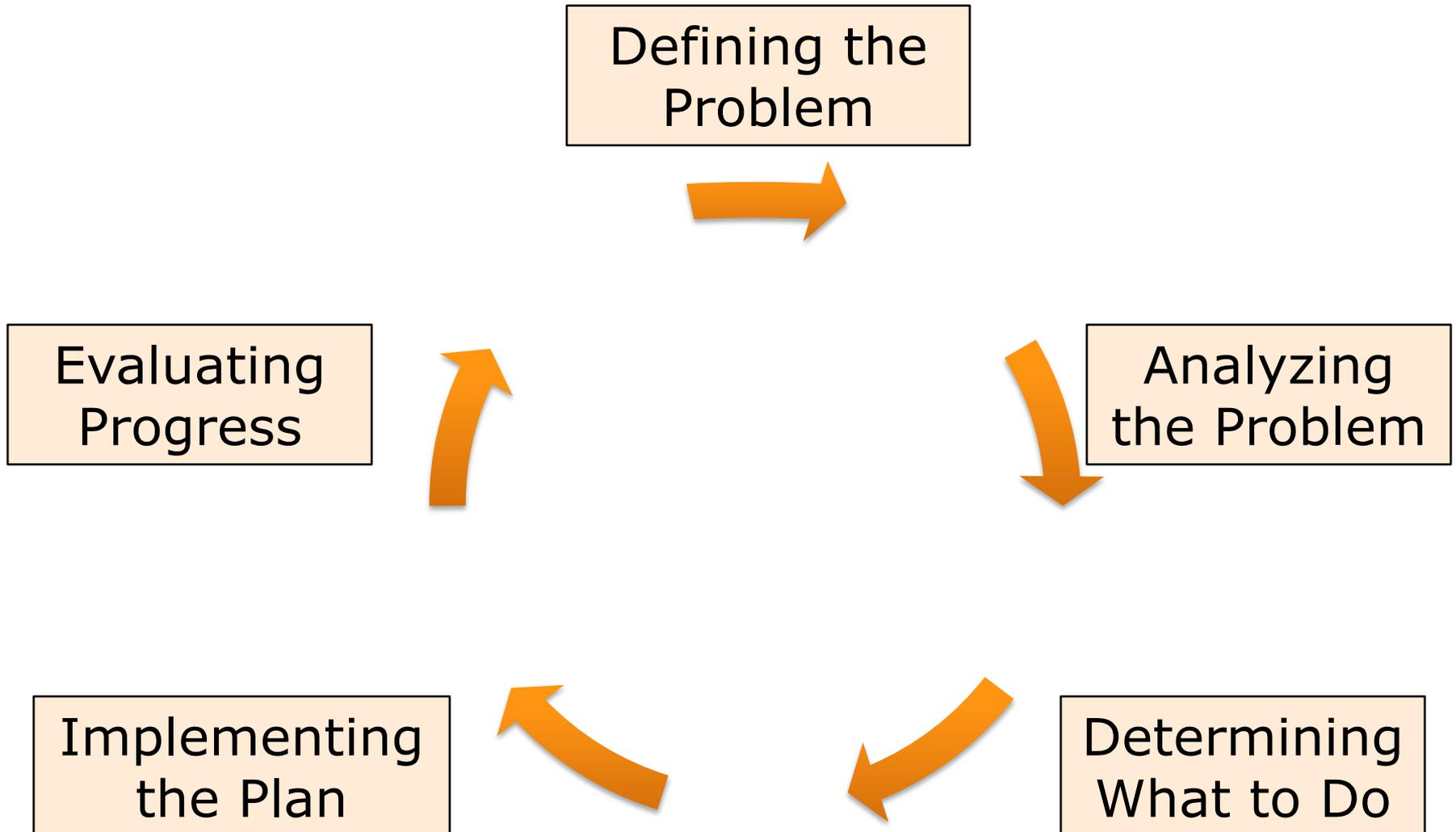
- ❑ Understand the need for quality instruction to be based on a systematic process of data collection, analysis and reporting.
- ❑ Understand a basic problem solving method and its application to various settings.
- ❑ Understand that problem solving teams function at different levels using data to make decisions about academic and behavioral needs of students across the tiers.

AGENDA

- ▣ Defining the Problem Solving Method with an Example
- ▣ Levels of the Problem Solving Method
- ▣ Thinking about Data-Based Decision Making in Schools

**DEFINING THE PROBLEM
SOLVING METHOD WITH AN
EXAMPLE**

Problem Solving Method



Problem Solving Method

Defining the Problem:

Is there a problem?

What is it?

How significant?



Analyzing the Problem:

Why is it happening?



Determining What to Do:

What shall we do about it?



Implementing the Plan with Fidelity



Evaluating Progress:

Did the plan work?

What needs to

happen next?



Use of the Problem Solving Method

- ❑ Facilitates more efficient, structured meetings
- ❑ Supports the development of targeted interventions
- ❑ Integrates data and decision-making

RtI calls for a shift in thinking

The central question is not
“What about the students is causing the
performance discrepancy?”

But

“What about the interaction of the
curriculum, instruction, learners, and
learning environment should be altered
so that students learn?”

Howell

Four Considerations within Problem Solving

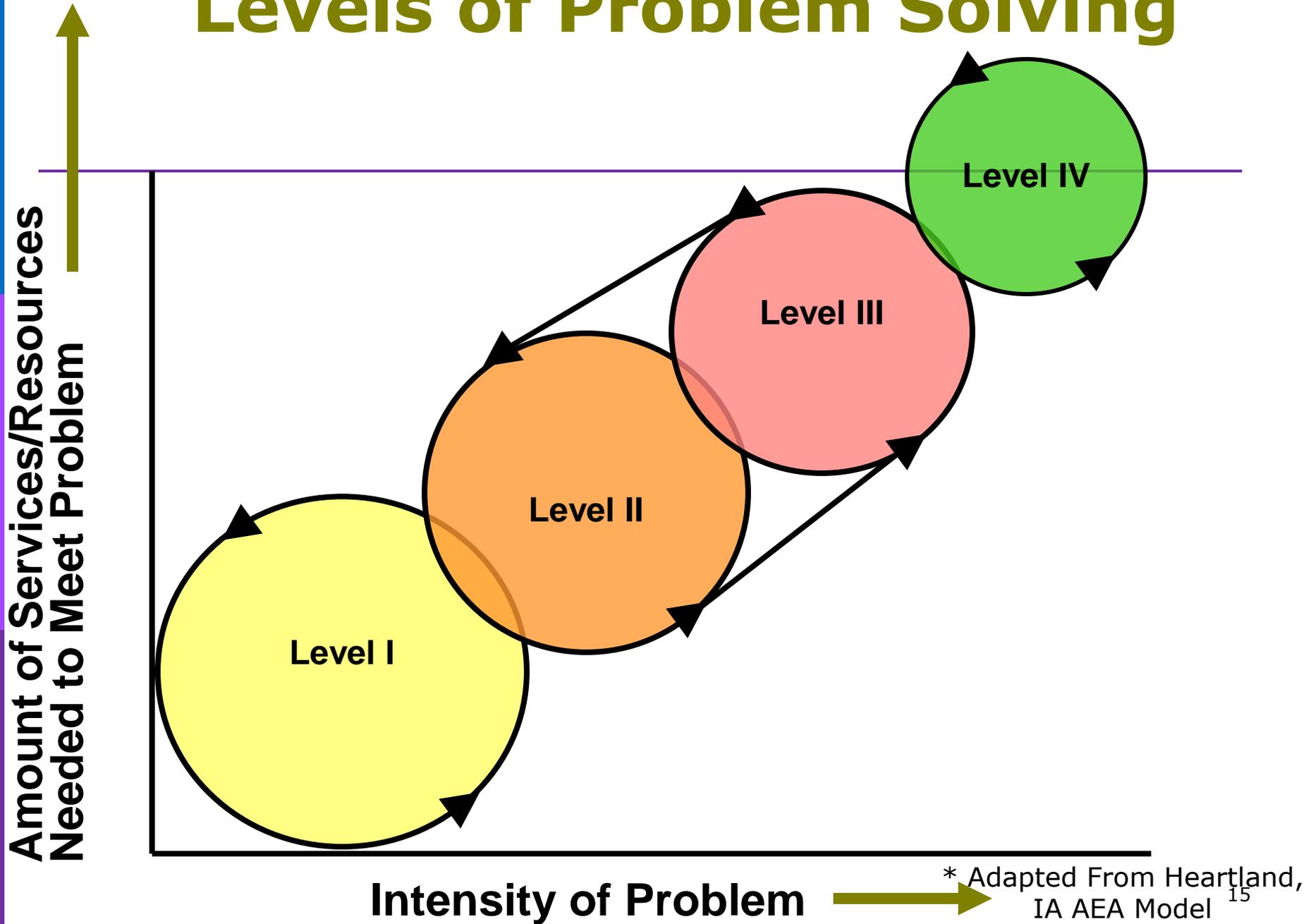
- Curriculum
 - “what is taught”
 - Instructional philosophy/approaches, content, & pacing
- Instruction
 - “how it’s taught”
 - Materials, direct instruction with explanation and cues, clear expectations and goals, sequencing
- Environment
 - “where instruction takes place”
 - Physical arrangement, rules, routines, expectations
- Learner
 - “who’s being taught”
 - Motivation, abilities
 - Considered after the above are addressed, if needed.

Critical RTI Elements Needed for Effective Data-Based Decision Making to Occur

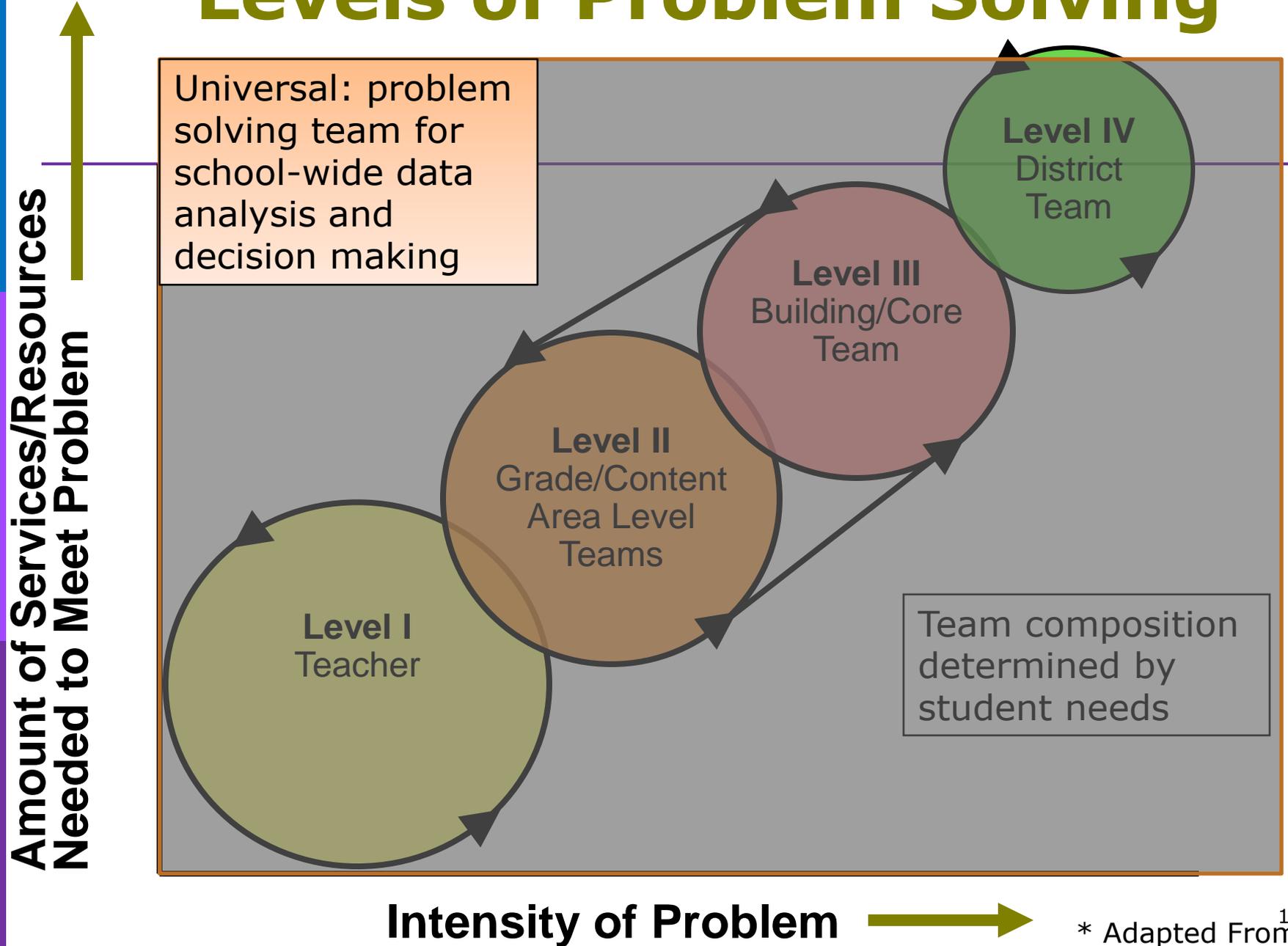
- ❑ Well functioning school-based leadership team and problem-solving team(s)
- ❑ School-wide screening & progress monitoring
- ❑ Systematic analysis of school-wide data
- ❑ Examination of current core academic and behavioral programs
- ❑ Identification of evidence-based interventions at tiers 2 and 3
- ❑ Determination of who will monitor progress monitoring
- ❑ Framework for data-based decision making

LEVELS OF THE PROBLEM SOLVING METHOD

Levels of Problem Solving



Levels of Problem Solving



THINKING ABOUT DATA- BASED DECISION MAKING IN SCHOOLS

Problem Solving Method

Defining the Problem:

Is there a problem?

What is it?

How significant?



Analyzing the Problem:

Why is it happening?



Determining What to Do:

What shall we do about it?



Implementing the Plan with Fidelity



Evaluating Progress:

Did the plan work?

What needs to

happen next?



Define the Problem: Look at your data



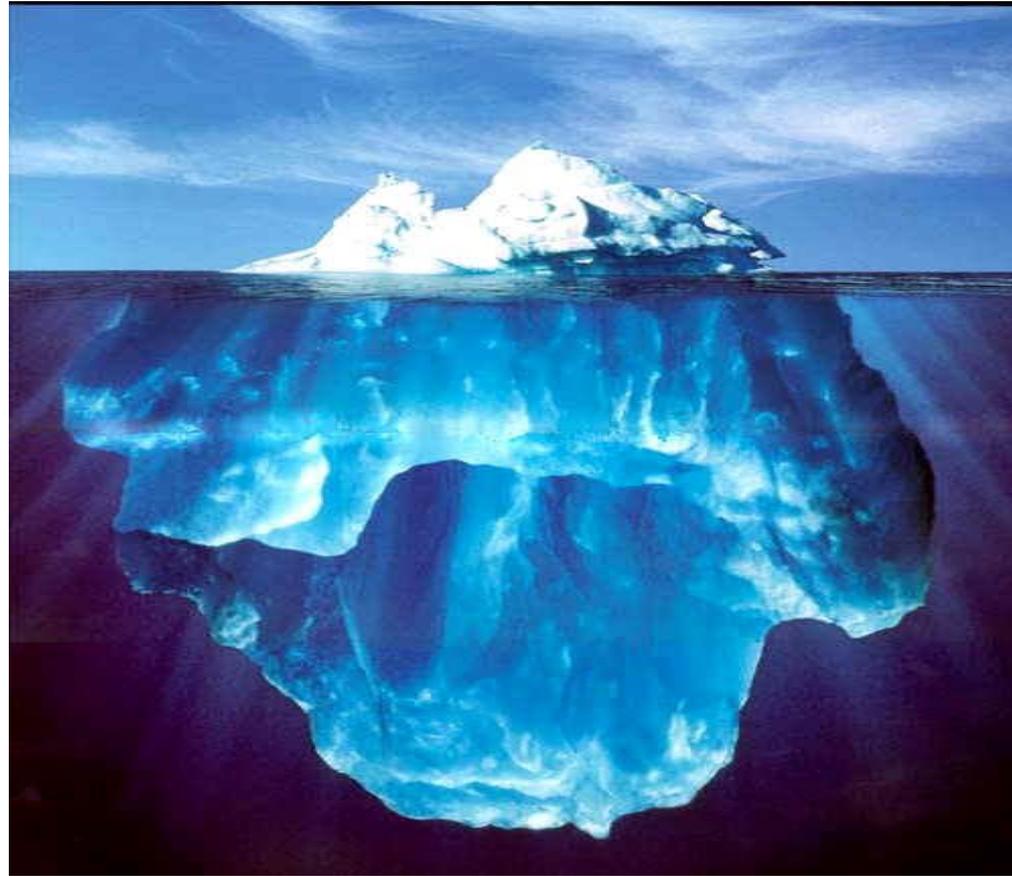
“Without data all anyone has is an opinion.”

Edward Deming

Problem Definition

| Tier | Considerations | Problem Solving Team |
|------|---|---|
| III | <ul style="list-style-type: none"> ▪How does a given student's performance level differ from the desired criterion? | <ul style="list-style-type: none"> ▪Building/Core Team ▪District Team |
| II | <ul style="list-style-type: none"> ▪How does a given student's performance level differ from the desired criterion? | <ul style="list-style-type: none"> ▪Building/Core Team ▪Grade Level/Content Area Team |
| I | <ul style="list-style-type: none"> ▪How significant is the behavior of concern? ▪How many students are proficient/at benchmark? ▪Is it an individual or group problem? | <ul style="list-style-type: none"> ▪School Leadership/Improvement Team ▪Grade Level/Content Area Teams ▪Teachers |

Data Analysis: Looking Beneath the Surface



What data do we need to develop a hypothesis?

Problem Analysis

"Why is the problem occurring?"

- ❑ Focus on instructionally relevant and changeable variables.
- ❑ Consider the domains of influence: curriculum, instruction, environment.
- ❑ Apply professional knowledge of content (importance of team composition and expertise).
- ❑ Prioritize and sequence instruction.

Problem Analysis

| Tier | Considerations |
|-------------|---|
| III | <ul style="list-style-type: none">▪Why is the behavior of concern occurring?▪How might the concern be reduced?▪Is additional assessment information needed? |
| II | <ul style="list-style-type: none">▪Why is the behavior of concern occurring?▪How might the concern be reduced?▪Is additional assessment information needed? |
| I | <ul style="list-style-type: none">▪What are the implications for curriculum and instruction?▪Why is the concern occurring?▪Skill or demonstration?▪How might the concern be reduced? |

Plan Development:

Set a goal to begin building the plan

“What are we going to do about it?”

- ❑ Focus on a measurable goal (s)
- ❑ Address the hypotheses reached during problem analysis
- ❑ Identify the materials, procedures, frequency, duration, starting date, and person providing the instruction
- ❑ Develop a progress monitoring plan including assessment, frequency, and who will collect
- ❑ Schedule time and procedures for reviewing the data

Plan Development

| Tier | Considerations |
|-------------|--|
| III | <ul style="list-style-type: none">▪How can interventions/services be intensified?▪What's the desired outcome/goal?▪How will progress be monitored and reviewed? |
| II | <ul style="list-style-type: none">▪What's the desired outcome/goal?▪What scientifically-based interventions are appropriate given the student's need?▪What's the needed frequency, duration?▪How will progress be monitored and reviewed? |
| I | <ul style="list-style-type: none">▪What instructional needs are indicated by the data?▪How can curriculum, instruction, or the environment be strengthened?▪What are the priority skills? |

Remember, interventions should. . .

- ❑ match the curriculum that is being taught
- ❑ match the problem that has been identified
- ❑ match the severity and intensity needed to effect change

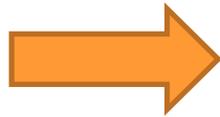
Lori Carmichael-Howe & Jennifer Dezarn-Lynch
MSD Wayne Township, Indianapolis, IN

Implementation Fidelity

- Addresses the questions
 - “was the intervention implemented as planned?”
 - “was it feasible?”
- Reviewing implementation fidelity data supports the team to make appropriate decisions about
 - the effectiveness of an intervention and
 - the future needs of a given student.

Ways to Measure Implementation Fidelity

- Self-report checklists
- Interviews
- Observations with optional performance feedback



Each requires.....

- a clear definition of the intervention,
- statements of who, when, how often, how long

Plan Implementation:

Did we do what we said we would do?

"Are we implementing the intervention as intended?"

"Are we collecting progress monitoring data?"

Evaluate Progress:

Did the plan work?

- ❑ Consider integrity of plan implementation
- ❑ Progress monitoring data reviewed
- ❑ Ineffective plans modified in a timely manner
- ❑ Intervention plans modified as appropriate to address emerging needs

Evaluate Progress

| Tier | Considerations |
|-------------|--|
| III | <ul style="list-style-type: none">▪Was the goal reached?▪Was progress made toward the goal?▪Do interventions/services need to be intensified? |
| II | <ul style="list-style-type: none">▪Was the goal reached?▪Was progress made toward the goal?▪Do interventions need to intensified and/or changed? |
| I | <ul style="list-style-type: none">▪Do proficient students maintain desired skill level over time? |

Is this problem solving team at a Tier I, II, or III level ?

- ▣ Progress monitoring data is reviewed regularly by teacher/interventionist and for some students, by building based teams to inform decisions about need for additional supports/services.

Is this problem solving team at a Tier I, II, or III level ?

- ▣ High School, School Improvement Team regularly analyzes District Assessments and universal screening data. Departmental teams use data for grouping and class assignment. Teachers use data for instructional design and collaborate with parents and other professionals to address individual student concerns.

Is this problem solving team at a Tier I, II, or III level ?

- ▣ Progress monitoring data is reviewed regularly by teacher/interventionist and by building based teams. Multidisciplinary and IEP teams involved for those students who are referred for special education evaluation.

Is this problem solving team at a Tier I, II, or III level ?

- ▣ Elementary School, School Improvement Team regularly analyzes District Assessments and DIBELS data (coinciding with 3 benchmark administrations). Grade level teams/teachers use data for flexible grouping and instructional design. Teachers collaborate with parents and other professionals to address individual student concerns.

Is this problem solving team at a Tier I, II, or III level ?

- ▣ Secondary academic problem solving teams including across grade-level and content-area teachers, administrators, and specialists as needed use data to develop intervention plans.

Take Home: Connecting Data-Based Decision Making to Indiana's Vision of RTI

- One component of Indiana's vision of response to intervention
- Utilizes a problem solving method across all tiers that relies on data to:
 - Determine core curriculum, instruction, interventions, and extensions
 - Determine the effectiveness of core curriculum, instruction, interventions and extensions
 - Determine the frequency of progress monitoring

Key Websites

National Center on Student Progress Monitoring (NCSPM)

www.studentprogress.org

National Research Center on Learning Disabilities (NCRLD)

www.nrclid.org

Research Institute on Progress Monitoring

www.progressmonitor.org

IRIS Center

<http://iris.peabody.vanderbilt.edu/>

Florida Center for Reading Research

<http://www.fcrr.org/>

Key Websites

Florida Center for Reading Research

<http://www.fcrr.org/>

Vaughn Gross Center for Reading and Language Arts

<http://www.texasreading.org/utcrla/>

Center on Instruction

<http://www.centeroninstruction.org>

University of Oregon

<http://www.reading.uoregon.edu/curricula>

Collaborative for Academic, Social, and Emotional Learning

<http://www.casel.org>

OSEP Center on Positive Behavioral Interventions & Supports

<http://www.pbis.org/tools>

References

- DuFour, Richard & Eaker, Robert. (1998). **Professional Learning Communities At Work, Best Practices for Enhancing Student Achievement**, National Educational Service & ASCD
- Fullan, Michael. "The Six Secrets of Change" address presented at the OSEP Project Directors' Meeting, Washington, D.C., July 20, 2008
- Miller, Ginger & Nellis, Leah (2008) "Problem Solving Method", Power Point Presentation, Blumberg Center for Interdisciplinary Studies, Indiana State University
- Popham, W. James. (2008). **Transformative Assessment**, ASCD
- Skiba, Russell J., Michael, Robert S., Nardo, Abra Carroll & Peterson, Reece. (2000). "The Color of Discipline, Sources of Racial & Gender Disproportionality in School Punishment", The Indiana Education Policy Center, Indiana University
- Tilly, W.David III. (2008) "The Evolution of School Psychology to Science-Based Practice: Problem Solving and the Three-Tiered Model" in **Best Practices in School Psychology V**, NASP